

What is claimed is:

1. An apparatus for providing pan and tilt capability to a stationary imaging device, the apparatus comprising:

a first achromatic prism doublet positioned on a first axis;

a second achromatic prism doublet positioned on the first axis; and

at least one motor for rotating the first and second achromatic prism doublets about the first axis whereby polychromatic electromagnetic radiation from a portion of an area of interest is directed toward an imaging device.

2. The apparatus of claim 1, wherein each of the first and second achromatic prism doublets comprises:

a first prism having a first surface lying in a plane substantially perpendicular to the first axis and a second surface lying in a plane forming a first angle with the first axis; and

a second prism having a first surface lying in a plane forming the first angle with the first axis and a second surface lying in a plane forming a second angle with the first axis;

wherein the second surface of the first prism and the first surface of the second prism are positioned adjacent to each other.

3. The apparatus of claim 2, wherein:

the first prism comprises zinc-sulfide; and

the second prism comprises sapphire.

4. The apparatus of claim 2, wherein:

the first prism comprises zinc-sulfide; and

the second prism comprises germanium.

5. The apparatus of claim 2, wherein:

the first angle is substantially 88.632° ; and

the second angle is substantially 100.624° .

6. The apparatus of claim 2, wherein:

the second surface of the first prism and the first surface of the second prism are positioned adjacent to each other.

7. The apparatus of claim 2, wherein:

the first surface of the first prism in the first doublet and the first surface of the first prism in the second doublet are positioned adjacent to each other.

8. The apparatus of claim 1, wherein the at least one motor rotates the first and second prism doublets in opposite directions and by equal amounts.

9. A method of providing pan and tilt capability to a stationary imaging device, the method comprising the steps of:

positioning a first achromatic prism doublet on a first axis;

positioning a second achromatic prism doublet on the first axis; and

rotating the first and second achromatic prism doublets about the first axis whereby polychromatic electromagnetic radiation from a portion of an area of interest is directed toward an imaging device.

10. The method of claim 9, wherein each of the first and second achromatic prism doublets comprises:

a first prism having a first surface lying in a plane substantially perpendicular to the first axis and a second surface lying in a plane forming a first angle with the first axis; and

a second prism having a first surface lying in a plane forming the first angle with the first axis and a second surface lying in a plane forming a second angle with the first axis;

wherein the second surface of the first prism and the first surface of the second prism are positioned adjacent to each other.

11. The method of claim 10, wherein:

the first prism comprises zinc-sulfide; and

the second prism comprises sapphire.

12. The method of claim 10, wherein:

the first prism comprises zinc-sulfide; and

the second prism comprises germanium.

13. The method of claim 10, wherein:

the first angle is substantially 88.632° ; and

the second angle is substantially 100.624° .

14. The method of claim 10, wherein:

the second surface of the first prism and the first surface of the second prism are positioned adjacent to each other.

15. The method of claim 10, wherein:

the first surface of the first prism in the first doublet and the first surface of the first prism in the second doublet are positioned adjacent to each other.

16. The method of claim 9, wherein the first and second prism doublets are rotated in opposite directions and by equal amounts.

17. The method of claim 9, wherein the first and second prism doublets are rotated in the same direction.